

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING

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July 17, 1990

TO:

Pamela Grubaugh-Littig, Permit Supervisor

FROM:

Jess Kelley, Reclamation Engineer \mathscr{JX}

RE:

Subsidence Monitoring Section of Annual Report, Co-Op Mining Company, Bear Canyon Mine, ACT/015/025, and Trail Canyon Mine,

ACT/015/021, Folder #2, Emery County, Utah

Synopsis

On March 3, 1990, the Division received from Co-Op Mining Company the 1989 Annual Report for the Bear Canyon and Trail Canyon This memorandum constitutes this writer's review of the subsidence section of the Annual Report and his findings concerning it.

Analysis

The subsidence survey for the Bear Canyon and Trail Canyon Mines is conducted yearly by Blackhawk Engineering Company. survey consists of numerical data from five survey stations and of observations made during a visual ground reconnaissance of the area in Trail Canyon and Bear Canyon. The locations of the five stations are shown on Map 3-3, a copy of which is contained in the annual report.

The subsidence measured at the five survey stations ranges from 0.06 inches to 0.47 inches, with the average being about 0.18 inches. No surface subsidence effects were observed during the ground reconnaissance.

This writer is satisfied with the subsidence section of the Annual Report. It is complete, understandable, and in accordance with the subsidence monitoring plan set forth in the Permit Application Package.

Recommendation

It is recommended that the subsidence section of Co-Op Mining Company's 1989 Annual Report be approved by the Division.

JK/djh AT60/26